

# SEAN BURGESS

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## Languages & Aptitudes

Python (NumPy, pandas, Matplotlib, Seaborn, Scikit-Learn, PyTorch), SQL, Git, HTML, MS Office

## Technical Skills

Regression (Linear, Logistic), Classification (K-NN, SVM, Random Forest), Data Cleaning & Interpretation

## PROJECTS

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### Bayesian Analysis in Predicting Overconfidence

[Link](#)

- Simulated a population of entrepreneurs distributed among three skill types
- Tested a multitude of scenarios in which the entrepreneurs learn from prior experience
- Analyzed perceived skill distributions to understand apparent overconfidence

### Currency Crises Predictions

[Link](#)

- Combined large data sets from the World Development Indicators DataBank
- Trained decision trees and identified accurate classifiers in MATLAB
- Predicted currency crises within rich countries

### TradeStation Trading System

- Built a trading system using EasyLanguage
- Implemented a daily/weekly reversal using multiple data streams

## EDUCATION

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### University of Houston

*Graduated 2020*

Mathematics, B.S.

Minor in Economics

Courses: Computer Science & Programming (Python), Intro to Programming (C++), Computing for Engineers (MATLAB), Advanced Linear Algebra, Probability, Statistics, Stochastic Processes

### Udacity

Deep Learning Nanodegree

Skills Covered: Deep Learning, Neural Networks, CNNs, RNNs, GANs

## EXPERIENCE

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### Mathematics Tutor

*Current*

*FindTutors, Peer Tutoring*

- Tutor in all areas of mathematics up to a high school level, such as pre-calculus and statistics
- Tutor former peers and colleagues in university level mathematics, such as probability and calculus

### Trading Apprenticeship

*Current*

- Build trading systems using EasyLanguage and Python
- Backtest various portfolios using multiple strategies